

U. S. Department of Energy



Thomas Jefferson National Accelerator Facility

1000 EVMS Guidelines Compliance

1000 Earned Value Management System Guidelines Compliance

This chapter of the Project Control System Manual identifies the chapters and sections that address the 32 Earned Value Management System guidelines established in the ANSI/EIA Standard-748-A-1998.

1001 Organization

- A. Define the authorized work elements for the program. A work breakdown structure, tailored for effective internal management control, is commonly used in this process.
 - 202 Work Breakdown Structure
- B. Identify the program organizational structure, including the major subcontractors responsible for accomplishing the authorized work, and define the organizational elements in which work will be planned and controlled.
 - 203 Project Organization
- C. Provide for the integration of the company's planning, scheduling, budgeting, work authorization and cost accumulation processes with each other, and as appropriate, the program work breakdown structure and the program organizational structure.
 - 300 Scheduling and Budgeting
 - 400 Work Authorization
 - 500 Accounting
 - 204 WBS and Project Organization Integration
 - 205 Responsibility Assignment Tree
- D. Identify the company organization or function responsible for controlling overhead (indirect costs).
 - 501.9 Indirect Costs
- E. Provide for integration of the program work breakdown structure and the program organizational structure in a manner that permits cost and schedule performance measurement by elements of either or both structures as needed.
 - 204 WBS and Project Organization Integration
 - 701 Variance Analysis

1002 Planning, Scheduling and Budgeting

- A. Schedule the authorized work in a manner which describes the sequence of work and identifies significant task interdependencies required to meet the requirements of the program.
 - 301 Schedule Planning
 - PCS-01 Schedule Planning Procedure
- B. Identify physical products, milestones, technical performance goals, or other indicators that will be used to measure progress.
 - 301.2 Schedule Development
- C. Establish and maintain a time-phased budget baseline, at the control account level, against which program performance can be measured. Budget for far-term efforts may be held in higher level accounts until an appropriate time for allocation at the control account level. Initial budgets established for performance measurement will be based on either internal management goals or the external customer negotiated target cost, including estimates for authorized but undefinitized work. On government contracts, if an over-target baseline is used for performance measurement reporting purposes, prior notification must be provided to the customer.
 - 303 Integrated Project Baseline
 - 303.1 Performance Measurement Baseline
- D. Establish budgets for authorized work with identification of significant cost elements (labor, material, etc.) as needed for internal management and for control of subcontractors.
 - 302 Cost Planning
 - PCS-02 Cost Planning Procedure
- E. To the extent it is practical to identify the authorized work in discrete work packages, establish budgets for this work in terms of dollars, hours, or other measurable units. Where the entire control account is not subdivided into work packages, identify the far term effort in larger planning packages for budget and scheduling purposes.
 - 302.4 Cost Estimate Development
- F. Provide that the sum of all work package budgets plus planning package budgets within a control account equals the control account budget.
 - 302.4 Cost Estimate Development

- G. Identify and control level of effort activity by time-phased budgets established for this purpose. Only that effort which is unmeasurable or for which measurement is impractical may be classified as level of effort.
 - 601.2 Earned Value
- H. Establish overhead budgets for each significant organizational component of the company for expenses which will become indirect costs. Reflect in the program budgets, at the appropriate level, the amounts in overhead pools that are planned to be allocated to the program as indirect costs.
 - 501.9 Indirect Costs
- I. Identify management reserves and undistributed budget.
 - 302.3 Funding Guidance
 - 302.4 Cost Estimate Development
 - 303.1 Performance Measurement Baseline
- J. Provide that the program target cost goal is reconciled with the sum of all internal program budgets and management reserves.
 - 302.4 Cost Estimate Development
 - 303.1 Performance Measurement Baseline

1003 Accounting Considerations

- A. Record direct costs in a manner consistent with the budgets in a formal system controlled by the general books of account.
 - 501 Cost Collection and Control
- B. When a work breakdown structure is used, summarize direct costs from control accounts into the work breakdown structure without allocation of a single control account to two or more work breakdown structure elements.
 - 501.6 Cost Reporting
- C. Summarize direct costs from the control accounts into the contractor's organizational elements without allocation of a single control account to two or more organizational elements.
 - 501.6 Cost Reporting

- D. Record all indirect costs which will be allocated to the contract.
 - 501.9 Indirect Costs
- E. Identify unit costs, equivalent unit costs, or lot costs when needed.
 - 501.2 Accounts Payable via Purchase Order (PO) Voucher
 - 501.6 Cost Reporting
- F. For EVMS, the material accounting system will provide for:
 - accurate cost accumulation and assignment of costs to control accounts in a manner consistent with the budgets using recognized, acceptable, costing techniques;
 - cost performance measurement at the point in time most suitable for the category of material involved, but no earlier than the time of progress payments or actual receipt of material; and
 - full accountability of all material purchased for the program including the residual inventory.
 - 502 Material Accounting System

1004 Analysis and Management Reports

- A. At least on a monthly basis, generate the following information at the control account and other levels as necessary for management control using actual cost data from, or reconcilable with, the accounting system.
 - Comparison of the amount of planned budget and the amount of budget earned for work accomplished. This comparison provides the schedule variance.
 - Comparison of the amount of the budget earned and the actual (applied where appropriate) direct costs for the same work. This comparison provides the cost variance.
 - 702.2 Schedule and Cost Management Systems Reports
 - PCS-03 Performance Reporting Procedure
- B. Identify, at least monthly, the significant differences between both planned and actual schedule performance and planned and actual cost performance, and provide the reasons for the variances in the detail needed by program management.
 - 702.2 Schedule and Cost Management Systems Reports
 - PCS-03 Performance Reporting Procedure

- C. Identify budgeted and applied (or actual) indirect costs at the level and frequency needed by management for effective control, along with the reasons for any significant variances.
 - 702.1 Financial Management System Reports
- D. Summarize the data elements and associated variances through the program organization and/or work breakdown structure to support management needs and any customer reporting specified in the contract.
 - 702.2 Schedule and Cost Management Systems Reports
 - PCS-03 Performance Reporting Procedure
- E. Implement managerial actions taken as the result of earned value information.
 - 700 Analysis and Reporting
 - 703 Meetings and Reviews
- F. Develop revised estimates of cost at completion based on performance to date, commitment values for material, and estimates of future conditions. Compare this information with the performance measurement baseline to identify variances at completion important to company management and any applicable customer reporting requirements including statements of funding requirements.
 - 701.2 Estimate at Completion
 - 702 Project Reports

1005 Revisions and Data Management

- A. Incorporate authorized changes in a timely manner, recording the effects of such changes in budgets and schedules. In the directed effort prior to negotiation of a change, base such revisions on the amount estimated and budgeted to the program organizations.
 - 801 Change Control Process
 - PCS-04 Change Control Procedure
- B. Reconcile current budgets to prior budgets in terms of changes to the authorized work and internal replanning in the detail needed by management for effective control.
 - 801 Change Control Process

- C. Control retroactive changes to records pertaining to work performed that would change previously reported amounts for actual costs, earned value, or budgets. Adjustments should be made only for correction of errors, routine accounting adjustments, effects of customer or management directed changes, or to improve the baseline integrity and accuracy of performance measurement data.
 - 801 Change Control Process
- D. Prevent revisions to the program budget except for authorized changes.
 - 801 Change Control Process
- E. Document changes to the performance measurement baseline.
 - 801.3 Documentation Phase